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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,033	01/16/2001	John Addink	302.31-US1	5699

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EXAMINER

LEE, PATRICK J

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,033

Applicant(s)

ADDINK ET AL.

Examiner

Patrick J. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 1-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to Response filed April 24th, 2003.

Claim Objections

2. Claims 1-14 are objected to because of the following informalities: Regarding claim 1, the term "measurement malfunction" is vague as it can be interpreted as the weather measuring device inaccurately measuring the current weather. As a result, claims 2-14 are also objected to. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 & 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Frankel et al 5,140,523.

With respect to claims 1 & 9, Frankel et al disclose a system for the prediction of lightning. The system comprises of a measurement array (21) and a predictor workstation (22). The measurement array (21) comprises of a plurality of anemometers and weather detecting devices (1-9) to detect precipitation, optical measures of lightning, acoustic signals of thunder, and the presence of charged clouds (see column 2, lines 41-48). The predictor workstation (22) comprises of processors I, II, III, IV, and V. Processor I serves as a data formatting means, as it is able to take current measures of weather and organizes them accordingly into a spreadsheet. Processor I

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is also capable of storing the data (see column 5, lines 29-40). Processors II and III serve as training means to ensure that the performance of the predictor workstation is satisfactory. Processors II and III produce the correlation from past historical weather data and from threshold values input by the user. Processor IV is the prediction module, where it takes current weather data from processor I and compares it with the correlation data from processor II to produce a signal that represents the probability of a lightning strike to Processor V (see column 11, lines 5-34). The variance of the current weather data from the historical weather data is an inherent element of the operation of the device. Processor V serves as a display device to provide the warning signals.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 2-4 & 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel et al 5,140,523.

Frankel et al disclose the system as described in the discussion of claim 1. With respect to claims 2-3, while Frankel et al do not explicitly disclose the use of a solar radiation sensor or a temperature sensor, such is known and would have been obvious in order to improve the devices' ability to predict lightning as temperature measurements can help assess the ability of the atmosphere to carry electrical charges and the solar radiation sensor can aid in the detection of cloud formations.

With respect to claim 4, the use of a non-volatile memory is not explicitly disclosed, but such is known and would have been obvious to one of ordinary skill as making such modifications accordingly would ensure the integrity of data stored in memory.

With respect to claim 6, it is not explicitly disclosed whether the storage device and microprocessor are disposed in a personal computer, but such is known and would have been obvious in order for the ease of use by the user.

With respect to claims 7-8, the location of the weather measuring device with respect to the microprocessor being distal or local is known and would have been mere matter of obvious design choice, as the location of the device could allow for ease of maintenance of the device (in the local case) or the capability to measure weather conditions at a place that most accurately represent the conditions (distal).

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With respect to claims 10-11, the use of a wired or wireless connection is known and would have been a mere matter obvious design choice in order to ensure the accurate transmission of the data.

With respect to claim 12, Frankel et al do not explicitly disclose an audible alarm, but such is known and would have been obvious in order to alert the user of an impending condition.

With respect to claims 13-14, the variation amount being a number or a percentage is known and would have been obvious in order to gain an understanding of the severity of the weather conditions.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel et al 5,140,523 in view of Miller 5,479,339.

With regards to claim 5, Frankel et al discloses the system as described in claim 1. However, Frankel et al does not disclose the microprocessor and memory being stored in an irrigation controller. Such is known and disclosed by Miller in the disclosure of an irrigation controlling and managing system. Irrigation controller (14) comprises of central processing unit (25) and memory (27). To modify the teachings of Frankel et al with those of Miller would have been obvious in order to dispose the system in an outdoors environment.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rasmussen et al 5,850,619 teaches a frozen precipitation alert system.

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Stevenson 6,057,769 teaches a snow sensor alarm system.

Davis 6,169,487 teaches a pressure based storm warning system.

Cragun 6,177,873 teaches a weather warning apparatus and method.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (703) 305-3871. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9558 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Patrick J. Lee
Examiner
Art Unit 2878

PJL

May 9, 2003


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800